

Smart Mobility

How we incorporate technology into our transportation system



Identified Needs & Opportunities



The City's Smart Mobility Framework laid out comprehensive strategies, but not priorities



Smart mobility can address traffic flow and safety without costly changes to the roadway



Partners are often needed to help expand the City's capabilities



Technology changes happen quickly and the City must be prepared



Smart Mobility Policies



Policies

The City of Alexandria will...

Use technology to optimize operations for safe, efficient travel on City streets.

Proactively plan for emerging and future transportation technologies to ensure that we can leverage innovation to meet our safety and efficiency goals.



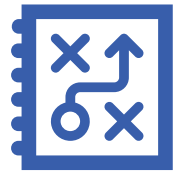
Strategies

That support policies

- ✓ SM1
- ✓ SM2
- ✓ SM3
- ✓ SM4

- ☐ SM1
- ☐ SM2
- ✓ SM3
- ✓ SM4





Smart Mobility *Strategies*

- **SM1.** Upgrade capabilities of the Traffic Management Center (TMC) to more effectively manage congestion and traffic incidents in real-time.
- **SM2.** Expand implementation of smart signal technology to enable detection and real-time signal adjustments based on travel conditions.
- **SM3.** Strategically invest in partnerships to expand City data, technology, and communications capabilities.
- **SM4.** Develop protocols and policies to accommodate autonomous vehicles and ensure that their adoption will support City goals.



Strategy SM1.

Upgrade capabilities of the Traffic Management Center (TMC) to more effectively manage congestion and traffic incidents in real-time.

- Implement automated interactive central conditions map to improve traffic visualizations.
- Expand coverage of closed-circuit television cameras.
- Improve communications with other TMCs.
- Incorporate resiliency and redundancy measures in the event of a failure, including a virtual back up.



What it means for you:

- A more **connected** traffic incident response system.
- More **convenient** travel with shorter incidents
- Improved **safety** with quicker incident response





Strategy SM2.

Expand implementation of smart signal technology to enable detection and real-time signal adjustments based on travel conditions.

- Enable vehicle, bicycle, and pedestrian detection for more responsive signal timing.
- Integrate transit and emergency vehicle pre-emption.
- Accommodate improved data collection.

What it means for you:

- More **convenient** travel with **connected** and better-timed traffic signals
- Improved **safety** with pedestrian and bicycle detection and emergency vehicle preemption





Strategy SM3.

Strategically invest in partnerships to expand City data, technology, and communications capabilities.

- Explore platforms to integrate mobility data and decision-making, and improve user access to information.
- Develop a template for evaluating partnership opportunities.
- Allocate necessary resources to leverage data from partnerships.



Waze for Cities Data

Helping cities manage traffic for millions of drivers in real time and make better infrastructure decisions

Alexandria has joined the WAZE for Cities Program, enabling access to more detail and more residents access to information about traveling in the City.

Source: Waze

What it means for you:

- More **connected** citizens with better access to data
- More **convenient** travel with more information in one place
- Improved **safety** with better mobility management



Strategy SM4.

Develop protocols and policies to accommodate autonomous vehicles and ensure that their adoption will support City goals.

- Prepare for autonomous vehicles by developing maintenance and infrastructure plans to ensure street readiness.
- Identify opportunities to promote shared, electric implementation to reduce potential for increased emissions and congestion.
- Consider pilot projects to evaluate effectiveness.



What it means for you:

- Support for more **convenient** ways to travel
- Improved **safety** through preparedness
- Greater **sustainability** with successful adoption of shared, electric model

